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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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07/528,446 03/17/00 FUJIMA

S	EXAMINER 1
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000466 MMC2/0824
YOUNG & THOMPSON
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ARLINGTON VA 22202

ART UNIT	PAPER NUMBER
MAI, S	2

DATE MAILED:
2818

08/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/528,446

Applicant(s)

FUJIMA

Examiner

S. MAI

Group Art Unit

2818

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 03-17-00
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-13 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-13 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The drawing(s) filed on 03-17-00 is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

Priority

- ✓ 1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

- ✓ 2. Figures 12-16 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- ✓ 4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant claims in lines 9-10, "column selecting lines...and the input/output lines are perpendicular to each other". This is contradictory to the disclosure shown in figure 2 which shows these lines are parallel to each other.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Patent 4,901,285 to Sano et al.

Sano et al. teach a semiconductor memory device having a hierarchical structure (figure 4A) which shows main word lines S and sub-word lines GS. Figure 1A shows the row decoding section, column decoding section (16). And at column 5, lines 46-50, Sano et al. teach the row selecting signal (RL) are parallel to the column selecting signal lines (SL). Figure 1A also shows the column selecting signal lines (SL) are provided between the adjacent word lines (RL).

7. Claims 6, 7, 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by

U. S. Patent 5,406,526 to Sugibayashi et al.

Sugibayashi et al. disclose a memory device having blocks and banks structure (fig. 1A). The memory device comprises: a row decoding section (11), a column pre-decoding section (37 in fig. 9B), a column decoding section (43 of fig. 9B) and a sense amplifier in the same area as the column decoding section (fig. 10B). Figure 10B also shows column selecting signal lines (in vertical direction) are perpendicular to the I/O lines (in horizontal direction).

8. Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S.

Patent 5,468,985 to Harima.

Harima teaches a memory device having blocks and banks of memory cells (fig. 15). The memory device comprises metallic wiring layers (103, 104) connected together through a through hole (column 4).

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Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kengeri et al. (U.S. Patent 5,717,645), Ohsawa (U.S. Patent 5,970,016).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son Mai whose telephone number is 703-305-3497. The examiner can normally be reached on 7-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 703-308-4910. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



August 16, 2000

Son Mai
Examiner
Art Unit 2818